

~~MIKAREY, M.; MERONIA, F.~~

"Turbochargers."

p. 2 (Czechoslovakia Heavy Industry) No. 1, 1968
Prague, Czechoslovakia

DC: Monthly Index of East European Accession (SEAI) Vol. 7, no. 1, LC.
April 1968

PEN'KOVSKIY, F.; MISARENKO, G.

Establishing year-round maintenance of machinery and equipment
at grain procurement stations and centers of Moscow Province.
Muk.-elev.prom. 26 no.2:6-8 F '60. (MIRA 13:6)

1. Nachal'nik Moskovskogo oblastnogo upravleniya khleboproduktov
(for Pen'kovskiy). 2. Nachal'nik tekhnicheskogo otdela
Moskovskogo oblastnogo upravleniya khleboproduktov (for
Misarenko).

(Moscow Province--Grain elevators--Equipment and supplies)
(Grain-handling machinery--Maintenance and repair)

Misarov, A.

Temperature hysteresis of the dielectric constant of BaTiO_3 monocrystals. Anna Misarova (Charles Univ., Prague). Czechoslov. J. Phys. 6, 827-828 (1966) (in Russian).
 — Monocryst. rectangular plates of BaTiO_3 were heated in a tubular oven for one hr. at 800–1000° and then within 15 hrs. cooled to room temp. The plot of the dielec. const. (ϵ) as a function of temp. had 3 sharp peaks corresponding to the transformations of BaTiO_3 at 120°, 10°, and –80°. The av. value of ϵ at room temp. was 1800. At higher temps. the max. of peaks shifted in the direction of higher temp. This was accompanied by a simultaneous increase in the temp. hysteresis of the ϵ . The relative error of the measurements was 2%.

A. P. Kotloby

MISAROVA, Anna

Aging of barium titanate single crystals. *Fiz.tver.tela* 2 no.6:
1276-1282 Je '60. (MIRA 13:8)

1. *Fizicheskiy institut Chekhoslovatskoy akademii nauk, Praha.*
(Barium titanate crystals)

11
 12
 13
 14
 15
 16
 17
 18
 19
 20
 21
 22
 23
 24
 25
 26
 27
 28
 29
 30
 31
 32
 33
 34
 35
 36
 37
 38
 39
 40
 41
 42
 43
 44
 45
 46
 47
 48
 49
 50
 51
 52
 53
 54
 55
 56
 57
 58
 59
 60
 61
 62
 63
 64
 65
 66
 67
 68
 69
 70
 71
 72
 73
 74
 75
 76
 77
 78
 79
 80
 81
 82
 83
 84
 85
 86
 87
 88
 89
 90
 91
 92
 93
 94
 95
 96
 97
 98
 99
 100
 101
 102
 103
 104
 105
 106
 107
 108
 109
 110
 111
 112
 113
 114
 115
 116
 117
 118
 119
 120
 121
 122
 123
 124
 125
 126
 127
 128
 129
 130
 131
 132
 133
 134
 135
 136
 137
 138
 139
 140
 141
 142
 143
 144
 145
 146
 147
 148
 149
 150
 151
 152
 153
 154
 155
 156
 157
 158
 159
 160
 161
 162
 163
 164
 165
 166
 167
 168
 169
 170
 171
 172
 173
 174
 175
 176
 177
 178
 179
 180
 181
 182
 183
 184
 185
 186
 187
 188
 189
 190
 191
 192
 193
 194
 195
 196
 197
 198
 199
 200
 201
 202
 203
 204
 205
 206
 207
 208
 209
 210
 211
 212
 213
 214
 215
 216
 217
 218
 219
 220
 221
 222
 223
 224
 225
 226
 227
 228
 229
 230
 231
 232
 233
 234
 235
 236
 237
 238
 239
 240
 241
 242
 243
 244
 245
 246
 247
 248
 249
 250
 251
 252
 253
 254
 255
 256
 257
 258
 259
 260
 261
 262
 263
 264
 265
 266
 267
 268
 269
 270
 271
 272
 273
 274
 275
 276
 277
 278
 279
 280
 281
 282
 283
 284
 285
 286
 287
 288
 289
 290
 291
 292
 293
 294
 295
 296
 297
 298
 299
 300
 301
 302
 303
 304
 305
 306
 307
 308
 309
 310
 311
 312
 313
 314
 315
 316
 317
 318
 319
 320
 321
 322
 323
 324
 325
 326
 327
 328
 329
 330
 331
 332
 333
 334
 335
 336
 337
 338
 339
 340
 341
 342
 343
 344
 345
 346
 347
 348
 349
 350
 351
 352
 353
 354
 355
 356
 357
 358
 359
 360
 361
 362
 363
 364
 365
 366
 367
 368
 369
 370
 371
 372
 373
 374
 375
 376
 377
 378
 379
 380
 381
 382
 383
 384
 385
 386
 387
 388
 389
 390
 391
 392
 393
 394
 395
 396
 397
 398
 399
 400
 401
 402
 403
 404
 405
 406
 407
 408
 409
 410
 411
 412
 413
 414
 415
 416
 417
 418
 419
 420
 421
 422
 423
 424
 425
 426
 427
 428
 429
 430
 431
 432
 433
 434
 435
 436
 437
 438
 439
 440
 441
 442
 443
 444
 445
 446
 447
 448
 449
 450
 451
 452
 453
 454
 455
 456
 457
 458
 459
 460
 461
 462
 463
 464
 465
 466
 467
 468
 469
 470
 471
 472
 473
 474
 475
 476
 477
 478
 479
 480
 481
 482
 483
 484
 485
 486
 487
 488
 489
 490
 491
 492
 493
 494
 495
 496
 497
 498
 499
 500
 501
 502
 503
 504
 505
 506
 507
 508
 509
 510
 511
 512
 513
 514
 515
 516
 517
 518
 519
 520
 521
 522
 523
 524
 525
 526
 527
 528
 529
 530
 531
 532
 533

The relaxation time τ of the system is determined by the frequency of the external field ω . The relaxation time τ is determined by the frequency of the external field ω . The relaxation time τ is determined by the frequency of the external field ω .

Card 1/2

1. Effectivity of various titration methods, depending
on the type of reagent used, and on the concentration of the
analyte (0.01M, 0.001M, 0.0001M, 0.00001M).

[Submitted in text: Complete translation]

2. Discussion.

Page 1/1

MISAROVA, Z.

SVEJCAR, J.; MISAROVA, Z.

Experience in the First Pediatric Clinic in Prague on the post-hepatic state in children. Cesk. pediat. 12 no.12:1062-1070 5 Dec 57.

1. Detská klinika, přednosta prof. MUDr. J. Svejcar.
(HEPATITIS, INFECTION, in inf. & child
seq. (Cz))

RASKA, Blazej; JODL, Jiri; MISAROVA, Zdena

Hypersensitivity to penicillin in a 15-month-old infant. Cesk.
pediat. 15 no.1:54-59 Ja '60.

1. Katedra nemocnicni pediatrie, vedouci prof. MUDr. J. Svejcar.
(PENICILLIN eff.inj.)

HRODEK, Otto; MISAROVA, Zdena

Renal changes in some diseases in children. J. esk. pediat. 17 no. 2:
769-774 S '62.

1. II. detska klinika Detske fakultni nemocnice v Praze, prednosta prof. F.
dr. J. Houstek, I. detska klinika Detske fakultni nemocnice v Praze,
prednosta prof. dr. J. Svejcar.

(ANEMIA) (LEUKEMIA) (KIDNEY DISEASES)
(HEMATURIA) (PROTEINURIA)

CEHNY, M.; SIMANKOVA, N.; MISAROVA, Z.; CERNA, M.

Chromosomal examination in leukemias in children. *Genk. pediatrii* 1962, no.11:976-979

1. Ustav obecné biologie fak. všeob. lek. Karlovy university v Praze,
prednosta prof. dr. B. Sekla I detska klinika fak. det. lek. Karlovy
university v Praze, prednosta prof. dr. J. Svejcar.
(CHROMOSOMES) (LEUKEMIA)

MISAROVA, Z.; ELIS, J.

Azaauracil riboside and azaauracil riboside triacetate in the therapy of leukemia in children. *Cesk. pediat.* 19 no.2:161-165 F'64.

1. Katedra nemocnicí pediatrie fakulty detského lékařství
Kl' v Praze a Ústředí farmakologická laborator CSAV, Praha.

MISAROVA, Z.: ELIS, J.

Introduction of new drugs into practice. Cesk. pediat. 19 no. 4:
286-299 Ap'64

1. Katedra nemocnicni pediatrie fakulty detskeho lekarstvi KU
v Praze, (veduci: prof. dr. J. Svejcar, DrSc.) a Farmakologic-
ky ustav CSAV v Praze (predstava: prof. dr. H. Raskova, DrSc.).

*

BERG, M.; SONKUP, F.; BERG, M.; MISAROVA, Z.; SIMANKOVA, N.; ELEFA, T. S.;
BOHACOVA, Z.

Karyological findings in multiple malformations. Acta med.
Carol.[med] (Praga): Suppl. 18: 111-118 '64.

I. Ústav obecné biologie fakulty všeobecného lékařství University
Karlov v Praze (prednosta: prof. dr. B. Sekla); I. detská
klinika fakulty detského lékařství University Karlov v Praze
(prednosta: prof. dr. J. Svajcar); III. detská klinika fakulty
všeobecného lékařství University Karlov v Praze (prednosta:
prof. dr. O. Vychytil) a IV. detská klinika fakulty všeobecného
lékařství University Karlov v Praze (prednosta: prof. dr.
F. Blazer).

... of ...
... () ...
...
...
... () ...

KOBYLE, M.; CERNY, M.; SOUKUP, F.; MISAHOVA, Z.; CERNA, M.; SIMANKOVA, M.;
POLECKOVA, E.; CHYLE, M.

Chromosomal characteristics of various lines of tissue cultures
in Czechoslovakia. Acta univ. Carol. [med] (Praga):Suppl. 18.
143-149 '64.

1. Ustav pro lekarskou mikrobiologii a imunologii fakulty vse-
obecneho lekarstvi University Karlovy v Praze (prednosta: prof.
dr. F. Patocka); Ustav obecné biologie fakulty všeobecného lékařství
University Karlovy v Praze (prednosta: prof. dr. B. Sekla) a
I. detska klinika fakulty detskeho lekarstvi University Karlovy
v Praze (prednosta: prof. dr. J. Svecar).

MISHYKUSIAK 51

9(4) PHASE I BOOK EXPLOITATION SW/1778

Mashino-tekhnicheskoye priborostroyeniye
priremakomosti. Mashinovoye priborostroyeniye
Transistorizatsiya elektroniki v priborostroyeniye; sbornik trudov
konferentsii (Translator Electronics in the Instrument-making
Industry; Collection of Conference Transactions) Moscow,
Gosizdat, 1959. 289 p. 1,400 copies printed.

Ed.: A.I. Gutsyakov, Doctor of Technical Sciences, Professor;
Ed.: Publishing House: S.D. Khramov, Tech Ed.: V.P.
Boshin; Managing Ed.: A.S. Zayonchaya, Engineer.

PURPOSE: The book is intended for scientific and engineering
personnel of the instrument-making and radio industries
engaged in the development of electronic and radio equipment.

COVERAGE: The authors of this collection of articles discuss
the theory, principles of operation, calculation and appli-
cation of electronic circuits using transistors. They also
describe transistor application in measuring circuits,
computers, radio and electronic and remote control circuits.
The book is based on transactions of the Scientific and
Engineering Conference organized by VVO in Moscow in
December 1956. The conference discussed 54 papers on
transistors, photocells, thermocouples, cooling elements,
semiconductors, rectifiers, crystal diodes, and transistors.
A considerable number of these papers have been included in
the present book. No personalities are mentioned. References
appear at the end of each article.

TABLE OF CONTENTS:

A.V. Kol'tsov, Engineer. Dispatcher-operated System
Using Nonlinear Capacitors and Transistors for Re-
mote Control of Mines
The author briefly describes the operation of
a remote control system used in mines. Chief
attention is given to the operation of trans-
mitting and receiving devices and their

Card 10/12

252

components, such as pulse generators and pulse
distributing circuits using nonlinear capacitors
and pulse forming circuits and coincidence circuits
using transistors. There are 6 references of which
3 are Soviet and 3 English.

A.V. Kiselevskiy, Engineer. Coding and Decoding De-
vices Using Transistors
The author discusses a two-channel transmission
system containing coding and decoding devices
and describes the system components, such as
pulse oscillators and modulators using trans-
istors. There are no references.

V.P. Gribner, Engineer. A Remote Control System Using
Transistors
The author describes the circuit and presents
the results of an experimental analysis of
the transistor coding system of a six-channel

Card 11/12

260

remote control line. There are no references.

AVAILABLE: Library of Congress

252

60040

S/024/59/000/C+/019/028
E061/E241

AUTHOR

Misaylovskiy S. V. (Leningrad)

TITLE

The Possibility of Correcting Systematic Errors of a
Digital Differential Analyser

PERIODICAL

Izvestiya Akademii nauk SSSR. Otdeleniye
tekhnicheskikh nauk. Energetika i avtomatika
Nr 6, pp 156-161 (USSR)

ABSTRACT

In solving the differential Eq (2) by the Euler method
in a digital differential analyser (DDA) successive
use is made of the formula (1), where h is the
integration step. This equation is a truncated Taylor
series containing only two terms and errors proportional
to h^2 may therefore arise. These errors are accumulated
and it is then necessary to choose a system of integrations
(the structural scheme) providing for the correction of
systematic errors. In connection with the choice of a
suitable scheme the following facts have to be remembered:
(a) Eq (1) (the characteristic equation of the DDA) is
approximate and is satisfied only in the mean, whereas
the DDA operates with arguments which can take only
two values $+1$ and -1 . Formula (3) is obtained
by replacing the differential Eq (4) by the corresponding

Card 1/4

S/024/59/000/06/014/0
 AC-1/E241

The Possibility of Correcting Systematic Errors of a Digital Differential Analyser

difference Eq (5). As an example, the solution (8) which is plotted as curves 1, 2, 3 in Fig 1. The solution of (8) on the DDA requires the scheme of integrators shown in Fig 2. The solution obtained by this means is shown by the broken curve 2' in Fig 1. Replacing (6) by the corresponding difference Eqs (9) leads to the solution (11) (exact) and (12) (approximate). This solution is plotted in curves 3, 3' in Fig 1. The errors are calculated according to Eqs (14). Manual calculation and simulation on the "Ural" machine have verified these equations. One possible method of introducing the corrections is as follows. The equation which is to be solved on the DDA is replaced by the difference equation whose solution coincides with the solution of the given differential equation. The structural scheme of the DDA is then designed to correspond with this difference equation. The solution obtained on the DDA with this scheme will coincide more accurately with the solution of the given

Card 2/4

S/O24/59/000/06/019/028
E081/E241

The Possibility of Correcting Systematic Errors of a Digital Difference Analyses

differential equation for all intervals of values of the independent variable. It has been shown above that solution of the system of Eqs (6) based on Eqs (1) and (9) gives a diverging vibratory process. The elimination of this divergence requires a damping term in (9) with a value such that the resultant vibration is undamped. The modified equation (9) will have the form (14) of which the solution (12) leads to the condition (17) for undamped harmonic vibrations. y_1 is then given by (12) or for sufficiently small k by

$$\sqrt{1 - \frac{k^2}{4}} = 1 - \frac{k^2}{4} - \frac{k^4}{32} - \frac{k^6}{256} - \dots$$

Then Eqs (19) hold and the solution of the difference Eq (14) with $A = k^2$ is the required solution. The structural scheme for the BDA is found by transforming (14) into the two sets of equations (20) and (21). The

Card 3/4

S/024/59/000/06/019/028
E081/E241

The Possibility of Correcting Systematic Errors of a Digital
Differential Analyser

system (20) corresponds to the structural scheme of Fig 3 and the system (21) to Fig 4. The results of calculations based on Eqns (20) are shown in Fig 5, from which it is evident that the errors do not accumulate. The correction points are marked TK on this figure, and their positions are determined by the fact that the output from the DDA is in the form ± 1 . The proposed correction method is only suitable for large intervals of change of the argument; for smaller intervals other methods must be used. There are 8 figures and 3 Soviet references

SUBMITT July 15 1959

101-4/1

69808

S/024/60/000/01/010/028
E081/E335

~~16.9500~~
16.6800

AUTHOR: Misaylovskiy, S.V. (Leningrad)

TITLE Rate Error of the Integrator in a Digital Differential
Analyser ^{1/5}

PERIODICAL: Izvestiya Akademii nauk SSSR, Otdeleniye tekhnicheskikh
nauk, Energetika i avtomatika, 1960, Nr 1, pp 86 - 89 (USSR)

ABSTRACT. The independent variable is fed to the integrator at less than the maximum rate (that rate occurs if every signal is +1 or -1). The problem is considered in relation to Eq (1) (the equation of a sin-to-cos converter, Figure 1). Figure 2 shows the accumulated error as a function of time for input rates expressed as fractions of the maximum rate. Then the argument turns to Eq (2), which represents exact operation in a single integrator; that equation is considered for two different sizes of step in the integration, with the independent variable fixed. Standard operations with differential difference equations lead to Eq (11) for the accumulated error. the paper concludes with brief discussions of two possible ways of eliminating that error without making the machine too complex. the best seems to be a device that compares the sign of each successive

Card1/2

69808

S/024/60/000/01/010/028

EO81/E335

Rate Error of the Integrator in a Digital Differential Analyser

charge in the independent variable with the sign of the
previous charge and allows (or does not allow) the signal
to enter the integrator, as may be appropriate.
There are 3 figures and 3 Soviet references

SUBMITTED July 15, 1959

Card 2/2

KLEYN, A.L.; DANILOV, A.M.; Primalni uchastiye: KOLYASNIKOV, M.P.;
MISBAKHOV, A.K.; ANTROPOVA, N.G.; NESMEYANOV, Ye.V.;
KHARITONOV, Yu.A.; TIMONINA, V.M.; LOPTEV, A.A.;
TSIKAREV, V.G.

Accelerating the assimilation of lime during slag formation
in basic open-hearth furnaces. Stal' 24 no.1:32-34 Ja '64.
(MIRA 17:2)

1. Ural'skiy nauchno-issledovatel'skiy institut chernykh
metallov i Zlatoustovskiy metallurgicheskiy zavod (for Kleyn,
Danilov).

POTGROS, V., dr.; SURDAN, C., dr.; MISCA, C., dr.; SOROCOC, Gh., dr.

Morbilliform eruption in a case of pararickettsial infection. Microbiologia (Bucur) 10 no.2:157-162 Mr-Apr'65.

1. Lucrare efectuata in Spitalul de boli infectioase "Dr. V. Babes" si Institutul de Inframicrobiologie al Academiei Republicii Populare Romine, Bucuresti.

GEORGESCU, I.; PIRVULESCU, Cl.; MISCA, G.; UDUDUC, I.; GRUMAZ, L.

Treatment of recurrent dislocation of the shoulder joint by
reinsertion of the capsule of the glenoid. Rumanian med. rev.
no.8:73-76 '62.

(SHOULDER DISLOCATION)

DORNESECU, G. T.; MISCALEANU, D.

Amitosis and cell gemmation. Comunicarile AR 11 no.11:1351-1355 N '61.

1. Comunicare prezentata de Th. Busnita, membru corespondent al Academiei R.P.R.

MISCEVIC, Dusan, ing. (Novi Sad, Maksima Gorkog 22)

Quantitative calculations in the gas chromatography for analyzing natural gas. Tehnika Jug 17 no.3:549-552a '62.

1. Sef laboratorije proizvođača Naftagas, Novi Sad.

"APPROVED FOR RELEASE: 06/14/2000

CIA-RDP86-00513R001134620001-3

APPROVED FOR RELEASE: 06/14/2000

CIA-RDP86-00513R001134620001-3"

MISCHKE, D.

4318

624.072.32.012.15 : 624.043

Mischke D., Mischke M. A DS Steel-and-Ceramic Arch.

"Luk Staloceramiczny DS". Inżynieria i Budownictwo. No. 7, 1955, pp. 220-222, 3 figs., 8 tabs.

With a view to lessening the work of the designer of DS steel-and-ceramic arches, a simplified method of computation is presented, and a table included showing the results obtained from the computation of more than ten DS arches; a simplified method of determining the reactions is also given. It follows from the consideration presented in the article that, given a normal load of the arch (thermal insulation of 50 kg/m², snow and wind), designers should give up computing the arch for each individual case; the reinforcement should be chosen according to the span of the arch and to the type of the hollow brick used, while the value of the reactions should be determined in a simplified manner according to the load, and to the span and shape of the arch in question.

2

Shank

"APPROVED FOR RELEASE: 06/14/2000

CIA-RDP86-00513R001134620001-3

APPROVED FOR RELEASE: 06/14/2000

CIA-RDP86-00513R001134620001-3"

MISCHKE, Jerzy, mgr inz. (Krakow)

Remarks on assembling beds of continuous mills. Hutnik P 29
no.4:136-138 Ap '62.

MISCHKE, K.

022243

2914

Mischke K. Drilling to Depths of More than 3000 Metres.

"Wiercenie do głębokości ponad 3000 metrów". Nafta. No. 9, 1953, pp. 221-222.

The author deals with the necessity of an early start with preparations for drilling oil wells the depth of which is to exceed 3000 metres, and, strictly speaking, of boreholes ranging from 3000 to 4000 metres. He reviews the prospects of preliminary work organisation on the basis of the actual need for such a method of drilling, as a result of variations in the construction of boreholes of a specified depth. The author separates into three groups such problems as have to be solved prior to commencing drilling operations on oil wells of the depths referred to. The first covers drilling tools and materials; the second, drilling mud and drilling cements; and the third, systematics and routine organisation of rotary drilling and the training of operatives and survey staff.

Mischke, K.

POL. 8

Pol. Small scale mechanization in cable drilling. K. Mischke.
Nefte (Krasnow), 1944, 18, 78-82. — Aims at elimination of
some manual work. Tabular analysis of workshop and field
work shows what can be done. M. S.

gan

"APPROVED FOR RELEASE: 06/14/2000

CIA-RDP86-00513R001134620001-3

APPROVED FOR RELEASE: 06/14/2000

CIA-RDP86-00513R001134620001-3"

MICROFILM, K.

In 1955, the first of the 100,000 copies of the film was made. The film was made in 1955, and the first of the 100,000 copies was made in 1955.

The film was made in 1955, and the first of the 100,000 copies was made in 1955.

MISCHE, Kazimierz

MISCHE, Kazimierz (P. 1947) : "Interviews of the P. 1947 in 1951," Nafta, Vol. III, No. 1, Katowice, 1951, p. 1-10.

MISCHKE, Kazimierz, mgr. inż.

The Scientific and Technical Association of Engineers and Technicians of the Petroleum Industry; its activities and plans. Przegl techn 79 no.1:32-33 Jan '58

1. Sekretarz Generalny Stowarzyszenia Naukowo-Techniczne Inżynierów i Techników Przemysłu Naftowego, Wrocław.

Int., E.

Needs of the Polish drill enterprises in the field of training
and other equipment. p. 11

Warta. (Instytut Hartow)

Warsaw, Poland. Vol. 1, no. 2, p. 11-15

Only list of East European accession order, Warsaw, 1952.
June 1952
1951.

MISCHKE, Kazimierz, mgr., inż.

Petroleum Mining discussing problems of technical progress. "Nafta"
Fol 16 no.2:4-50 '60.

1. Redaktor: działowy miesięcznika "Nafta"

MISCHKE, Kazimierz, mgr., inż.

Technical progress in the petroleum industry. "Gazeta Pol 16 no.5:
117-121 '60.

1. Stowarzyszenie Naukowe Inżynierów i Techników Przemysłu Naftowego.

MISCHKE, Kazimierz mgr inż

Analysis of the conditions of efficiency of operation of the
petroleum industry. Prace Inst. naft. 40:1-1

MISCHKE, Kazimierz, mgr., inz.; HOLANSKI, Zygmunt, inz.; PTAK, Marian,
mgr., inz.; WOJCIK, Jozef, mgr., inz.; ZECHENTER, Jan, mgr. inz.

A Preliminary instruction on cementing. Prace Inst naft no. 66:13-
26 '61.

MISCHKE, Kazimierz, mgr inż.

Analysis of the curvature parameters of boreholes. Prace Inst naft
no.75:1-15 '63.

MISCHKE, Krazimierz, mgr inż.

Methods of determining the admissible hole deviation on known structures. Nafta Pol 19 Special issue:39-45 19-26 Je '63.

1. Instytut Naftowy, Krakow.

MISCHKE, Kazimierz, mgr inż.

Test pressure in checking the tightness of the column of
casings in a drilling hole. Wafta 20 no. 12-12-72 Ag 12.

1. Scientific research fellow, Petroleum Institute, Krakow.

1. The first of these

is the fact that the United States has a long history of

MISCHKE, M. *M.*

✓1318

024.072.32.012.15 : 024.042

Mischke D., Mischke M. A DS Steel-and-Ceramic Arch.

"Łuk staloceramiczny DS", Inżynieria i Budownictwo, No. 7, 1955, pp. 328-332, 3 figs., 8 tabs.

With a view to lessening the work of the designer of DS steel-and-ceramic arches, a simplified method of computation is presented, and a table included showing the results obtained from the computation of more than ten DS arches; a simplified method of determining the reactions is also given. It follows from the consideration presented in the article that, given a normal load of the arch (thermal insulation of 10 kg/m², snow and wind), designers should give up computing the arch for each individual case; the reinforcement should be chosen according to the span of the arch and to the type of the hollow brick used, while the value of the reactions should be determined in a simplified manner according to the load, and to the span and shape of the arch in question.

2

Shmidt

MISCHKE, Maciej, mgr., inż.

Damage of cement silos. Cement wapno gips 16/26 no.8/9:277-280 '61.

1. Biuro Projektow Przemyslu Cementowego i Wapienniczego, Krakow.

(Silos) (Cement)

MISCHKE, Maciej, mgr.inz.

Problem of walling and roofing cement plants. Cement wapienniczy
17 no.4:99-101 Ap '62

1. Biuro Projektow Przemyslu Cementowego i Wapienniczego, Krakow.

MISCICKA, M

10- 3
/ Examination of chemical heterogeneity of glass. Maria
Miscicka (Inst. Przem. Szkla i Ceramiki, Warsaw). ~~Przem.
Przemyslu Szkla i Ceramiki 5, 62-78(1968)(English
and Russian summaries).~~—The optical methods of exam-
glass heterogeneity are reviewed. The Hübner method
(Szkla Tech. 5, 196(1964)) is recommended for industrial
tests. L. Stecki

"APPROVED FOR RELEASE: 06/14/2000

CIA-RDP86-00513R001134620001-3

APPROVED FOR RELEASE: 06/14/2000

CIA-RDP86-00513R001134620001-3"

1

RUMANIA

ȘUTU, A., Dr; LUPU, I., Dr; MIȘCOI, M., Dr.

The Neuropsychiatry Hospital of Sibiu, Infantile Neuropsychiatry Section (Spitalul de neuropsihiatrie Sibiu, Sectia neuropsihiatrie infantila) - (For all).

Bucharest, Viata Medicala, No 13, 1 Jul 63, pp 885-892

"Three Years' Experimentation With Phenylbutasone In the Treatment of Acute Chorea."

(3)

MISCOV V.
1

19
Recovery of silver from the fixing bath of radiographic films. Valentin Missov, M. Marinescu, and Beuterina Condurache, Sanatorium for the tuberculous "Bisericanii," Bucharest, Romania). *Farmacia* (Bucharest) 7, 167-8 (1959).—The used fixing bath is evapd. to $\frac{1}{10}$ of its original vol. and treated with concd. HNO_3 in the amt. of 8% of the vol. of the liquid. On further boiling Ag_2S is pptd. After filtering the ppt. is treated with warm HNO_3 , and the Ag_2S passes into soln. as AgNO_3 ; this is treated with HCl , giving AgCl , which is reduced with granulated Zn and HCl .
Felicitas D. Goodman

5

ST

Rp

KOLOTILO, D.M. [Kolotilo, D.M.], kand.tekhn.nauk; MISECHKO, V.I.

Determining the heat resistance of polymers and hydrocarbon formations by means of the differential-thermal analysis method.

Khim.prom. [Ukr.] no.2:73-74 Apr-Je '65.

(MIRA 18:6)

ZELINKA, Jan; PELCOVA, Libuse; MISECKA, Jan

Corn-steep examination of water in starch factories. Biologia 1^o
no.2:94-102 '60. (ZAI 9:5)

1. Slovenska akademie vied, Biologicky ustav, Oddelenie technickej
mikrobiologie, pracovisko Boleraz.
(CORN (MAIZE) (STARCH) (ANTIBIOTICS) (WATER)

1. ZAN, R.; NISBINA, I.; ALI, A., ed.

Generalization of the results of the experiments on the
Vilnius, Lithuania, in 1984. (1984).
In: Lithuania, 1984. (1984).

MISEK, Alois; SKOLIK, Vladimir, inz.; SIROKY, Jiri

Subsidiary and auxiliary services in industrial constructions.
Podnik organizace 16 no.12:544-546 D '62.

1. Technicko-organizacni vyzkumny ustav strojirensky.

MISF, B. (1971) (1971) (1971) (1971) (1971)

The number of classes of matrices is the number of
matrices. The number of matrices is the number of

L 31764-66

ACC NR: AP6021705

SOURCE CODE: CZ/001 / 1966/1 / 12

AUTHOR: Misok, B.—Mishok, B. (Engineer)

ORG: Institute of Technology, Brno (Vysoko uceni technicka)

TITLE: Nomograph for determining the enlargement ratio of the defect in radiography

SOURCE: Strojirenstvi, v. 16, no. 1, 1966, 70-72

TOPIC TAGS: radiography, photographic film

ABSTRACT: The methods are explained for determining the percentual enlargement ratio of defect images detected by radiography. A nomograph is presented which permits the very accurate calculation of the enlargement. It gives the relationship between the enlargement ratio, focus of radiation and the distance dividing the defect from the screen plane or film. Orig. art. has: 3 figures, 3 formulas and 2 tables. [Based on author's Eng. abst.] [JPRS]

SUB CODE: 14 / SUBM DATE: none / ORIG REF: 004 / OTH REF: 003

Card 1/1

UDC: 620.179.15:77(08)

MISEK, E.

How to heat without causing fire. p. 13².
ELECTRONICS. Vol. 4, no. 6, June 1954. Prague.

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 5, no. 6, June 1956 uncl.

MISEK, E.

Bohumir Barton, writer about the railroad men's life. p. 145.
ZELEZNICE. Vol. 4, no. 6, June 1954. Prague.

SO: Monthly List of East European Acquisitions (EML) LC, Vol. 5, No. 6, June 1958 incl.

WISEK, R.

Exemplary care for locomotives. p. 209.
ZELEZNICE, Prague, Vol. 4, no. 3, Aug. 1954.

SC: Monthly List of East European Accessions, (EEAL), LC, Vol. 5, No. 6,
June 1956, Uncl.

MISEK, E.

An inadequately repaired locomotive complains. p. 217.
ZELEZNICE, Prague, Vol. 4, no. 8, Aug. 1954.

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 5, No. 6,
June 1956, Uncl.

MISEK, E.

For fulfillment of the autumn transportation campaign. p. 284.
ZELEZNICE, Prague, Vol. 4, no. 11, Nov. 1954.

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 5, No. 6,
June 1956, Uncl.

MISEK, E.

Proposal for betterment. p. 299.
ZELEZNICE, Prague, Vol. 4, no. 11, Nov. 1954.

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 5, No. 6,
June 1956, Uncl.

L 2861-66 ⁴⁴ET(d)/EWP(1) IJP(a) BB/GG
ACC NRAT5027850 SOURCE CODE: CZ/2503/65/000/011/0027/0043

AUTHOR: ⁴⁴Burian, M., ⁴⁴Krishtoufek K. -- ⁴⁴Kristoufek, K.; ⁴⁴Misek, J. -- ⁴⁴Misek, J.: 77
Zborzhil, V. -- Zboril, V.

ORG: ⁴⁴Research Institute for Mathematical Machines, Prague (Issledovatel'skiy institut
matematicheskikh mashin) 44 71
K+1

TITLE: Ferrite memory with semiconductor control circuits

SOURCE: ^{66, 11}Ceskoslovenska akademie ved. Vyzkumny ustav matematickych stroju. Stroje na
zpracovani informac, no. 11, 1965, 27-43

TOPIC TAGS: ferrite core memory, memory core, memory time, control circuit, semi-
conductor device, transistorized circuit

ABSTRACT: This paper describes a ferrite core memory which utilizes transistors (437) and
semiconductor diodes (864). It has a capacity of 5000 numbers, each of which consists of 30
binary digits. The reversal cycle of the memory lasts 13 μ sec while the retrieval time is 4
 μ sec. The basic memory component consists of RI-TO ferrite cores with a rectangular hys-
teresis loop made at the Institute of Powder Metallurgy (Institut poroshkovoy metallurgii) at
Shumperk. The retrieval system coordinates are realized very economically by means of
transistorized address switches and two current pulse drivers. The memory consists of
rectangular plates with 50 x 100 cores. The address retrieval is in the 1/10 code. Tests
were carried out on a special computer imitator modeling real operating conditions of actual

Card 1/2

AT5027850
computers. The authors describe the principles and mode of memory operation, discuss the block of the matrix, present the block diagram of the operation of the control pulse generator and of the current driver, and discuss the adder and blocking unit amplifiers. Imitator tests (pulse frequency up to 80 kc, double pulses in 13 μ sec succession at 5 kc frequency; core-limited temperature range between 18 and 35C) show that the unit is capable of reliable operation under quite varied circumstances. The author thanks his associates Engr. Barton (who built the imitator), Engr. Mikulecki, and comrade Shedina for their help during the construction of the memory. Orig. art. has: 1 formula and 11 figures.

SUB CODE: 09/ SUBM DATE: 29Jan64/ OTH REF: 003/ ATD PRESS: 4147 [08]

MISEK, K.

4

CZECH

374.13
4272. Analogous systems for free modes of oscillations of beams. K. MISEK. Czech. J. Phys., 1, No. 3-4, 185-9 (1957).

Deals with a method of calculating an analogous system. The calculation is carried out for the n -th harmonic for longitudinal and torsional vibrations and for first and second overtones for transverse vibrations. The case of excitation is compared according to dynamical rigidity. A.

row

MISEK, K.

"A paratus for Measuring Internal Damping," p 151.
(Casopis Pro Pestovani Fysiky, Vol.3, No.2, Apr. 1953, Praha.)

SO: Monthly List of ^{East European} ~~1953~~ ^{Vol.2, No.9} Accessions,/Library of Congress, September 1953, Uncl.

CZECH

539.32 : 534.213
A dynamic method for measuring the expansion
coefficient and the temperature coefficient of the
modulus of elasticity. K. MISEK, Letter in Czech. J.
Phys., 3, 169-70 (June, 1955) in Russian.

Both coefficients are determined simultaneously
from the measured frequencies of longitudinal or
lateral waves in the substance at three temperatures,
preferably within an interval of less than 100°C.

A. ORLITSKY

MISEK, K.

CZECH

534.372

7222. An instrument for the measurement of damping capacity. K. MISEK. Czech. J. Phys., 4, 67-67 (Feb., 1954) In Russian-Summary (2 pp.) in English.

Apparatus is described for measuring the longitudinal, transverse and torsional vibrations of cylindrical rods at temperatures up to 100°C. The vibrations are excited and detected by electrostatic means and the logarithmic decrement is registered with a valve voltmeter. Careful attention is paid to the method of supporting the rods and to the design of the electrical circuits. The results of measurements of the log-dec. in air and in vacuo for Al and steel are described and it is shown that, for rods of given length, losses in the pick-up circuit are solely responsible for the dependence of the decrement on the rod diameter for Al and mainly responsible for it in steel. The effect on the damping of heat treatment of steel and Al and of corrosion of steel and brass is described.

II. J. H. STARKEN

MISFK, K.

New magnetomechanical phenomenon in nickel. p. 389

Vol. 5, no. 4, July 1955
CESKOSLOVENSKY CASOPIS FYZIKU
Praha, Czechoslovakia

So: Eastern European Accession Vol. 5, No. 4, 1956

MISEK, K.

Physics in the People's Republic of China. p. 718

Vol. 5, no. 6, Nov. 1955

ČESKOSLOVENSKÝ ČASOPIS PRO FYZIKU

Praha, Czechoslovakia

So: Eastern European Accession Vol. 5, No. 4, 1956

Misek, K.

Maximum internal damping of nickel caused by carbon. P. 37
CESKOSLOVENSKY CASOPIS PRO FYSIKU. (Ceskoslovenska akademie ved.
Ustav technicke fyziky) Praha
Vol. 6, no. 1, Jan. 1956

Source: EIAL - LC Vol. 5. No. 10 Oct. 1956

MISEK, KAREL

CZECHOSLOVAKIA / Magnetism. Ferromagnetism.

F-4

Abs Jour : Ref Zhur - Fizika, No 3, 1957, No 6853

Author : Misek, Karel

Inst : Institute of Technical Physics, Czechoslovak Academy of Sciences, Prague, Czechoslovakia.

Title : New Investigations of the Magnetomechanical Effect

Orig Pub : Ceskosl. casop. fys., 1956, 6, No 3, 324 - 332

Abstract : Description of new experiments in the investigation of magnetomechanical phenomena in certain ferromagnetics and new details concerning the effect in nickel. The possibility of the irreversible magnetic maximum of attenuation is investigated. See Referat Zhur - Fizika, 1956, 13651, 16955.

Car : 1,1

MISEK, K.

4557. NEW EXPERIMENTS ON THE MAGNETOMECHANICAL PHENOMENON/AN. MISEK.

555.37 : 539.06

Czech. J. Phys., vol. 6, No. 4, 330-40 (Aug., 1956).

A description is given of new experiments on magnetomechanical effect, observed on torsionally oscillating specimens on a number of ferromagnetic materials and additional data are given for nickel. The question is discussed whether irreversible magnetization processes fundamentally influence the origin of the observed magnetomechanical effect.

"APPROVED FOR RELEASE: 06/14/2000

CIA-RDP86-00513R001134620001-3

APPROVED FOR RELEASE: 06/14/2000

CIA-RDP86-00513R001134620001-3"

MISTEK, K.

Origin of the magnetomechanical phenomenon in an alternating magnetic field.

P. 222 (Ceskoslovenska Morfologie. Vol. 5, no. 4, 1967 Praha, Czechoslovakia)

Monthly Index of East European Accessions (EIAI) L. Vol. 7, no. 2,
February 1958

CZECHOSLOVAKIA/Magnetism Ferromagnetism.

Abs Jour : Ref Zhur - Fizika, No 6, 1959 13211

Author : Misk, Karel

Inst : Institute of Technical Physics, Czechoslovak Academy of Sciences, Prague, Czechoslovakia

Title : On the Origin of the Magneto-mechanical Phenomenon in an Alternating Field.

Orig Pub : Czechosl. fiz. zh. 1959, No 2, 247-248

Abstract : The author gives several results of the measurement of the damping of torsional oscillations of nickel wire as a function of the dimensions and of the field intensity. It is indicated that the possible mechanism for the anomalous growth in internal friction is connected with microscopic eddy currents arising during reversible displacement of the domain boundaries.

Card 1/1

- 65 -

CZECHOSLOVAKIA/S-11: Stat. Physics - Mechanical Properties of E-10
Crystals and Polycrystalline Substances.

Abs Jour : Ref Zhur - Fizika, No 12, 1958, No 27631

Author : Misek Karel

Inst : Institut of Technical Physics, Czechoslovak Academy of
Science, Prague

Title : Internal Friction of Nickel in a Complicated Magnetic Field.

Orig Pub : Chekhosl. fiz. zh., 1958, 3, No 1, 129-230

Abstract : Curves were plotted, characterizing the dependence of the
internal friction of nickel under the influence of a direct
and alternating magnetic field.

Card : 1/1

CZECHOSLOVAKIA/Solid State Physics - Mechanical Properties

2-10

Ref Jour : Ref Jour - Fizika, No 5, 1959, No 10715

Author : Misek Karl

Inst : -

Title : Internal Friction of Nickel in a Complicated Magnetic Field

Orig Pub : Ceskosl. casop. fys., 1958, 4, No 1, 143-144

Abstract : See Referat Jour Fizika, 1958, No 12, 27631

Card : 1/1

AUTHOR: Míšek, Karel

CZECH/57-58-5-25/30

TITLE: Comments on "Internal Damping of Thin Nickel Layers in an Alternating Field" (Vnitřní tlumení tenkých niklových vrstev ve střídavém poli) and Reply by A. Cişman

PERIODICAL: Československý Časopis Pro Fysiku, 1958, Nr 5, Vol 8 pp 743 - 744 (Czech)

ABSTRACT: Cişman, Rothenstein and Hrianca published (Ref 1) a brief paper on the nature of the magneto-mechanical phenomenon in an alternating field, in which they considered the influence of the thickness of a layer of nickel, electrolytically deposited on a brass wire, increment in damping measured as a function of the amplitude of the field. Although the measured increment in the damping is low ($\Delta Q < 3 \cdot 10^{-4}$ for a specimen 56 μ thick) and the measurement was difficult, the author succeeded in verifying by means of a new method in the case of annealed specimens that the phenomenon is caused by microscopic eddy currents associated with reverse movements of domain walls, which was expressed on the basis of the independence of the damping of the diameter of the nickel specimen, Ref 2 (Figure 1, reproduced from Ref 1). From the dependence

Card1/5

CZECH/37-58-0-25/30

Comments on "Internal Damping of Thin Nickel Layers in an Alternating Field" and Reply by A. Cişman

of ΔQ^{-1} on the thickness of the layer (see Ref 1, Figure 2) the authors of that paper arrived at the conclusion that at the spot where there is a sharp break, the boundary walls between the domains cease to exist and the entire layer becomes a single-domain one. The assumed disappearance of the boundary walls corresponds to a thickness of about 3μ , which is about one order of magnitude larger than the thickness of 0.3μ quoted by Kittel (Ref 3) on the basis of theoretical calculations. Until a theory of the magneto-mechanical phenomenon in an alternating field is worked out, it is difficult to estimate at what thickness the phenomenon ceases to exist. In spite of this, it can be stated that the critical thickness determined by measuring the damping is, in reality, nearer to the theoretical value of Kittel. From studying more closely the graph, Figure 1, it is obvious that the maxima are of two differing characters: the maxima 1 and 4 are relatively sharp while the maxima 2, 3 and 5 are flat. However, it is known that the character of the maxima of the magneto-mechanical phenomenon in an alternating field

Card2/5

CZECH/3, -58-b-25/30

Comments on "Internal Damping of Thin Nickel Layers In an Alternating Field" and Reply by A. Cisman

always changes continuously (Figure 2, Ref 4 and Figure 3, Ref 5). If all the maxima had the same character, which must be the case in reality, we would probably obtain one of the two curves shown in Figure 2; both lead to lower values of the critical thickness. On the basis of available experience, it can be assumed that the magnitude of the maxima decreases monotonously with the thickness and that there is no sharp break. The cause of a differing shape of the Curves 1 and 4 can be the high sensitivity of the specimens to working and deformation. It is remarkable that the curves of the dependence of

ΔQ^{-1} on the field amplitude in the work by Cisman et al (Ref 1) all have approximately the same inclination of the steep part in the same way as was observed in massive 1 mm dia specimens by the author of this note (Ref 2). As has been pointed out in earlier work (Ref 6) this inclination (but not the magnitude of the maximum) is in accordance with the Zener relation for relaxation phenomena.

Card3/5

Comments on "Internal Damping of Thin Nickel Layers in an Alternating Field" and Reply by A. Cişman CZECH/37-58-6-25/30

Reply by A. Cişman.

The relation between the magneto-mechanical phenomenon and the Neel-Kittel theory is only qualitative. The decrease in $Q_{\max}^{-1}$ in Figure 2 does indeed depict the inclination of thin layers in the process of transition to the single domain range. However, it depicts only the approximation to the transition but not the transition itself. The experiments described by the author have shown that the investigated phenomenon is very sensitive to certain factors as, for instance, heat treatment and internal stresses. The latter is very important since it reduces considerably this phenomenon. As was mentioned at the beginning of the article, Q^{-1} of thin electrolytically deposited layers depend on the amplitude of the alternating magnetic field only after heat treatment. This obviously reduces partly internal stresses which were caused mainly by the presence of hydrogen. It is possible that the rapid decrease of damping observed in layers of thicknesses below 3μ is caused by internal stresses which

Card4/5

Comments on "Internal Damping of Thin Nickel Layers in an
Alternating Field" and Reply by A. Cişman

22001/5/-58-6-25/30

were not sufficiently eliminated in spite of the fact that the respective layers were carefully heat-treated. Although it is very difficult to carry out these experiments in view of the very slight changes in the measured value, the authors do not consider it advisable to discard valuable results simply because they are not in accordance with the, so far, imperfect theory.

There are 2 figures and 6 references, 4 of which are Czech, 1 English and 1 Soviet.

ASSOCIATIONS: Ústav technické fyziky ČSAV, Praha (Institute of Technical Physics of the Ac.Sc.), Prague - (K. Míšek)
Institutul Politehnic, Timişoara (Polytechnical Institute), Rumania (A. Cişman)

SUBMITTED: May 22, 1958

Card 5/5

AUTHOR: Mířek, Karel

CZECH/37-58-0-30/30

TITLE: Conference on Relaxation Phenomena in Metals and Alloys
(Konference o relaxačních jevech v kovech a slitinách)

PERIODICAL: Československý Časopis Pro Fysiku, 1958, Nr 6,
pp 749 - 750 (Czech)

ABSTRACT: A conference was held at the Moscow Institute of Steel
on April 2 - 5, 1958 on relaxation phenomena in pure
metals and alloys. There were 200 domestic and 2 foreign
participants (including the author of this note).

ASSOCIATION: Ústav technické fyziky ČSAV, Praha (Institute of
Technical Physics of the Czech Ac.Sc., Prague).

SUBMITTED: May 7, 1958

Card 1/1

MISEK KAREL

AUTHORS: Mířek, Karel and Kratochvílová, Eva CZECH/37-59-3-19/29
TITLE: "Spurious" ΔG Effect in Nickel (Letter to the Editor)
PERIODICAL: Československý časopis pro fysiku, 1959, Nr 3, pp 323-324
ABSTRACT: The modulus of elasticity of ferromagnetic materials normally increases with magnetization. Recently, Ochsenfeld (Ref 2) has studied this ΔG effect on Ni, Fe alloys and found a ΔG negative in weak fields. We have studied ΔG on Ni by measuring the torsional vibrations of a nickel wire in either a DC or an AC magnetic field. Figure 1 shows $f \sim G$ as a function of the magnetic field (1st DC, 2nd AC). The negative ΔG effect is larger in an AC field. The paper further shows that the minimum in G closely corresponds to an observed maximum in the internal friction. There are 1 figure and 4 references, of which 1 is Soviet, 1 English, 1 German and 1 Czech.

Card1/2

"Spurious" ΔG Effect in Nickel (Letter to the Editor) CZECH/37-59-3-19/29

ASSOCIATION: Ústav technické fyziky ČSAV, Praha
(Institute of Technical Physics of the Czechoslovak
Ac.Sc., Prague)

SUBMITTED: November 21, 1958

Card 2/2

2/037/62/000/004/002/008
E073/E435

00000
AUTHOR: Višek, K.

TITLE: Measurement of the electrical resistance of thin metal wires

1. CITACE: Československý časopis pro fyziku, no.4, 1962, 332-345

2. ABST. Equipment for measuring the electrical resistance of thin wires which is sufficiently sensitive to detect small changes in the electrical resistance produced by hardening the metal is described. Two variants of the equipment were studied: one serving for resistance measurements at room temperature in a liquid bath, the other for measurements in liquid nitrogen. Relative measurements of the ratio of the resistances of the compared and the reference specimen in an intensively intermixed water bath at room temperature proved to be best from the point of view of reproducibility of the results, easy calculation and low requirements as regards stability of the bath. The probable error of an individual measured value is $\pm 2 \times 10^{-4}\%$, provided a constant temperature is maintained in the room. This accuracy permits detecting changes in the specific resistance of platinum
Card 1/2

Measurement of the electrical ...

Z/037/62/000/004/002/008
E073/E435

of $\approx 2.5 \times 10^{-11}$ microhm.cm. Thus the method is sufficiently accurate for studying the influence of quenched-in vacancies on the electrical resistance of metals using a commercial Thompson bridge. It is thereby advantageous that the ratio of the resistance of the measured and the reference specimen is obtained by a single measurement. However, interpolation has to be applied for achieving the necessary sensitivity. The bridge method will not yield results that are more accurate than those obtained with the method of potentials which permits complete exclusion of the resistance of the leads. There are 5 figures and 5 tables.

ASSOCIATION: Ústav fyziky pevných látek ČSAV, Praha
(Institute of Solid State Physics, ČSAV, Prague)

SUBMITTED: December 1, 1961

Card 2/2

2/037/63/000/002/001/004
E140/E155

AUTHORS: Míček K., and Polák J.

TITLE: Measurement of the temperature of fine metal wires

PERIODICAL: Československý časopis pro fyziku, no.2, 1963, 87-93

TEXT: The study of activation energies in very pure metals, in particular of the precious metals, has recently become a center of attention. The most frequent method of obtaining vacancies in solid solution has been to heat fine wires (several hundredths of mm diameter) by the passage of current, and to cut off the current. The advantages are that internal stresses do not arise in the wire, and plastic deformation is practically eliminated. The main problem is the accurate determination of the temperature. The possible error in determining the activation energy due to error in temperature measurement is of the same order as the precision attainable (hundredths of eV) and therefore improved methods of temperature determination are desirable. The article applies the Matthiessen rule to the problem, under the following assumptions: the temperature dependence of the metal for the standard annealed state is known, and the component of resistivity due to impurities

Card 1/2

Measurement of the temperature of ... **Z/037/63/000/002/001/004**
E140/E135

or lattice defects is independent of temperature. Then the ratio of resistances k_t for the standard, as a function of the actually measured ratio of resistances k'_t of the "impure" sample is given by:

$$k_t = k'_t(R'_0/R_0) - [(R'_0/R_0) - 1](1 - \alpha t) \quad (6)$$

This formula was verified for platinum containing several parts per thousand of impurities.

There are 1 figure and 1 table.

ASSOCIATION: Ústav fyziky pevných látek ČSAV, Praha
 (Institute of Solid State Physics, Czech AS, Prague)

SUBMITTED: June 27, 1962

Card 2/2

MI. SK, K. [Misek, K.]

Concerning an article by I.B. Kekalo and B.G. Lifshits entitled
"Dependence of internal friction and shear modulus in nickel
on the magnetizing field," Fiz. met. i metalloved. 15, no. 6:
1972, 34-35. (MIRA 1977)

1. Institut fiziko-metallov in the Zhosievutskoy akademii nauk,
Praga.

(Nickel—Magnetic properties)

(Internal friction)

(Kekalo, I.B.) (Lifshits, B.G.)

MISEK, Karel; POLAK, Jaroslav

Measurement of the temperature of thin metallic wires.
Čas. vys. fys 13 no.2:87-93 '63

1. Ústav fyziky pevných látek, Československá akademie věd,
Praha.